

Am



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/651,260	08/30/2000	Jong Sang Baek	8733.A285	1251
30827	7590	03/26/2004	EXAMINER	
MCKENNA LONG & ALDRIDGE LLP 1900 K STREET, NW WASHINGTON, DC 20006			NGUYEN, KIMNHUNG T	
			ART UNIT	PAPER NUMBER
			2674	28

DATE MAILED: 03/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/651,260

Applicant(s)

BAEK, JONG SANG

Examiner

Kimmhung Nguyen

Art Unit

2674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This Application has been examined. The claims 1-6 are pending. The examination results are as following.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-2 and 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Chang et al. (US 6,611,247).

Regarding claim 1, Chang et al. disclose in figures 7-9, a liquid crystal display device with a multi-timing controller (70) comprising a liquid crystal display panel having a display standard (see resolution of figure table); an interface (50, figure 1) receiving a timing data inputted from the exterior thereof and a control signal corresponding to the display standard; a timing controller for latching and outputting the timing data inputted from the interface, and for generating and outputting timing signals for driving the liquid crystal display panel based on the control signal; and a driving circuit for receiving the timing signals outputted from the timing controller to display a picture corresponding to the display standard, wherein said timing controller includes a decoder (82, figure 8) and a timing generator (42, figure 3), wherein timing generation information corresponding to a plurality of display standards is stored by the decoder

Art Unit: 2674

(see resolution of VGA, SVGA,XGA of table 2), wherein the decoder outputs to the timing generator, timing information corresponding to the timing data, and wherein timing generator outputs timing signals corresponding to the timing information and the control signal (see abstract).

Regarding claim 2, Chang et al. disclose the liquid crystal display device further comprising a dip switch (see switching element TFT, see column 1, lines 32-33) for selecting the timing data corresponding to the display standard.

Regarding claim 6, Chang et al. disclose wherein the display standard is selected from SVGA (see column 2, table 2).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chang et al. (US 6,611,247) in view of Barshinger (US 5,049,864).

Chang et al. disclose in figures 7-9, a liquid crystal display device with a multi-timing controller (70) as discusses above. However, Chang et al. do not disclose wherein the decoder consists of a memory for storing certain timing information and a multiplexor for selecting any one of the timing information stored in the memory. Barshinger discloses in figure 1, the LCD (26, 28, 30) having decoder and mutiplexer (22) are stored in the memory (14, see column 4,

Art Unit: 2674

lines 6-15). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teachings of the LCD having decoder and mutiplexer are stored in the memory as taught by Barshinger because this would be made available to the decoder as 8 bit numbers (see column 4, lines 29-33).

Allowable Subject Matter

5. Claims 4-5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The present invention is directed a liquid crystal display device with a multi-timing controller comprising a liquid crystal display panel having a display standard receiving a timing data inputted from the exterior thereof and a control signal corresponding to the display standard; a timing controller for latching and outputting the timing data inputted from the interface, and for generating and outputting timing signals for driving the liquid crystal display panel based on the control signal; and a driving circuit for receiving the timing signals outputted from the timing controller to display a picture corresponding to the display standard, wherein said timing controller includes a decoder, and a timing generator, wherein timing generation information corresponding to a plurality of display standards is stored by the decoder. The combination of Chang et al. (US 6,611,247) and Barshinger (US 5,049,864) show a similar system having multi-timing controller and a plurality of display standards is stored by a decoder. However, they fail to teach wherein the timing generator includes a first controller for generating the timing signal

Art Unit: 2674

corresponding to the timing information selected from the decoder, a second, a third, a fourth, and a fifth controller for always equally keeping the polarity of the horizontal/vertical synchronizing signal as claim 4.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimnhung Nguyen whose telephone number (703) 308-0425.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **RICHARD A HJERPE** can be reached on (703) 305-4709.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D. C. 20231

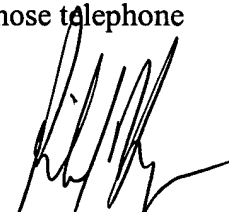
Or faxed to:

(703) 872-9314 (for Technology Center 2600 only).

Hand-delivery response should be brought to: Crystal Park II, 2121 Crystal Drive, Arlington, VA Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Kimnhung Nguyen
March 15, 2004


RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600